

SCOPE OF APPLICATION

AULEKTRO® - PROTECTIVE WELDING LENSES

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AULEKTRO® - PROTECTIVE WELDING LENSES

Protective welding lenses may only be used during welding. The correct protection level must be selected in accordance with the following table:

Protection levels¹⁾ during flame cutting

Work	q = Volume throughput of oxygen in l/h		
	900 ≤ q ≤ 2000	2000 ≤ q ≤ 4000	4000 ≤ q ≤ 8000
Flame cutting	5	6	7

1) Depending on the conditions for use, the next highest or the next lowest protection level can be used.

Protection levels¹⁾ during gas welding and hard soldering

Work	q = Volume throughput of acetylene in l/h			
	q ≤ 70	70 ≤ q ≤ 200	200 ≤ q ≤ 800	q > 800
Welding and hard soldering of heavy metals ²⁾	4	5	6	7
Welding with emitting flux (in particular light metal alloys)	4a	5a	6a	7a

1) Depending on the conditions for use, the next highest or the next lowest protection level can be used.
 2) The expression «heavy metal» refers to steel, alloy steels, copper and its alloys, etc.

Protection levels¹⁾ and recommended use during light arc welding

Welding process or related technologies	Current in amperes																								
	0,5	1	2,5	5	10	15	20	30	40	60	80	100	125	150	175	200	225	250	275	300	350	400	450	500	
Sheathed electrodes																									
MIG for heavy metals ²⁾																									
MIG for light metal alloys																									
WIG for all metals and alloys																									
MAG																									
Arc gouging																									
Plasma cutting																									
[illegible] welding																									

1) Depending on the conditions for use, the next highest or the next lowest protection level can be used.
 2) The expression «heavy metal» refers to steel, alloy steels, copper and its alloys, etc.

Comment: the shaded areas in the table are equivalent to areas where that particular welding process is not conventionally used in current welding process.

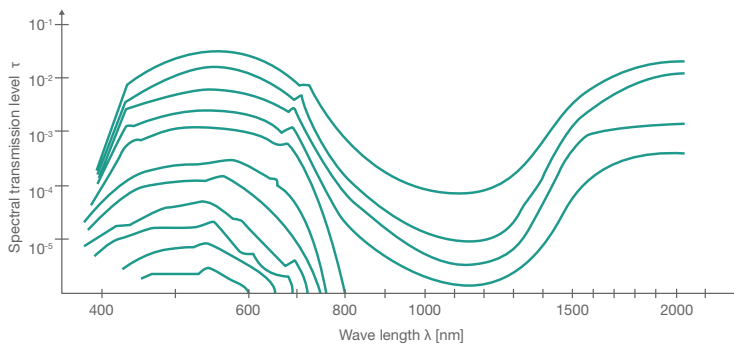
The selection of the correct safety level depends on the amount of protection the protective welding lenses provides against dangerous radiation within the ultraviolet and infra-red spectrum. The protection level must hence be selected to ensure that the welding arc does not cause blinding.

When the welding arc is ignited, looking directly at the welding radiation without protection should be avoided, as this can lead to painful inflammation of the cornea and irreversible clouding of the lens (grey star). A protection level may deviate by one level above or below the level suitable for the welding process, at most. Should a different protection level be selected after the visual impression, an examination by an ophthalmologist is recommended.

Protective welding lenses must be changed if it is broken, scratched and sprayed with welding beads which affect vision, and scattered light has been noted. Protective welding lenses should be cleaned with water and detergent, and disinfected with regular disinfectant. If the glass needs changing, it must only be exchanged for an equivalent glass of the same protection level, which has been tested and given the EN label and the CE sign.

Protective welding lenses may only be used for welding, and not for any other purpose. In particular, it should not be used as a safety glass for sunglasses in traffic, as this can impair recognition of signals. Information about protective welding lenses and absorption procedures shows the following curve:

Spectral transmission level of AULEKTRO® protective welding lenses levels 3-14



Explanation of protective welding lenses labelling in accordance with CE

Registered trademark _____ AULEKTRO® _____ 10 _____ FW _____ 1 _____ CE _____ DIN EN 166 _____ xxxx _____

Protection level according to DIN EN 166 _____

Manufacturer's identification code _____

Optical grade according to DIN EN 166 _____

Conformity symbol indicating conformity with Directive 89/686/EEC _____

Certification _____

Order number _____

Class	Optical power (dpl or cm/m)		
	Sph	Ast	Pris
1	+0.06	0.06	0.12
2	+0.12	0.12	0.25
3	+0.12/0.25	0.25	1.0 / 0.25

Your partner for welder protection glass:

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